

**DRAFT**  
**Outline of Remarks of**  
**John Andrew, Assistant Deputy Director**  
**California Department of Water Resources (DWR)**  
**at the**  
**Quadrennial Energy Review Public Meeting**  
**June 19, 2014**  
**San Francisco, California**

1. DWR and its role in water-energy operations and planning
  - a. State Water Project
  - b. Statewide water planning and management
2. Statewide water-energy background
  - a. Water systems and end uses comprise about 12% of statewide energy demand (without netting out the energy generation of water and wastewater systems)
  - b. End uses (e.g. heating, cooling, pressurization) are about 80% of this 12% (or about 10% of statewide energy demand)
  - c. Drought impacts
    - i. Decrease in hydropower
    - ii. Increase in energy demand for groundwater pumping
3. Water-energy planning at the State level
  - a. California Water Plan Update
    - i. Energy implications of resource management strategies
    - ii. Regional energy intensity of different water supplies
  - b. Integrated Regional Water Management
  - c. Water-Energy grantmaking (Cap & Trade funding)
  - d. Water-Energy Subgroup of the Governor's Climate Action Team
4. Needs
  - a. Support collaborations between local water and energy utilities
  - b. Technical
    - i. Data gaps, especially groundwater
    - ii. Standard methodologies
  - c. Policy and planning
    - i. "Nexus" of water-energy with climate adaptation and other water resources objectives
    - ii. Water intensity of energy generation
    - iii. Context of GHG emissions reduction
  - d. Understanding, if not peace and love